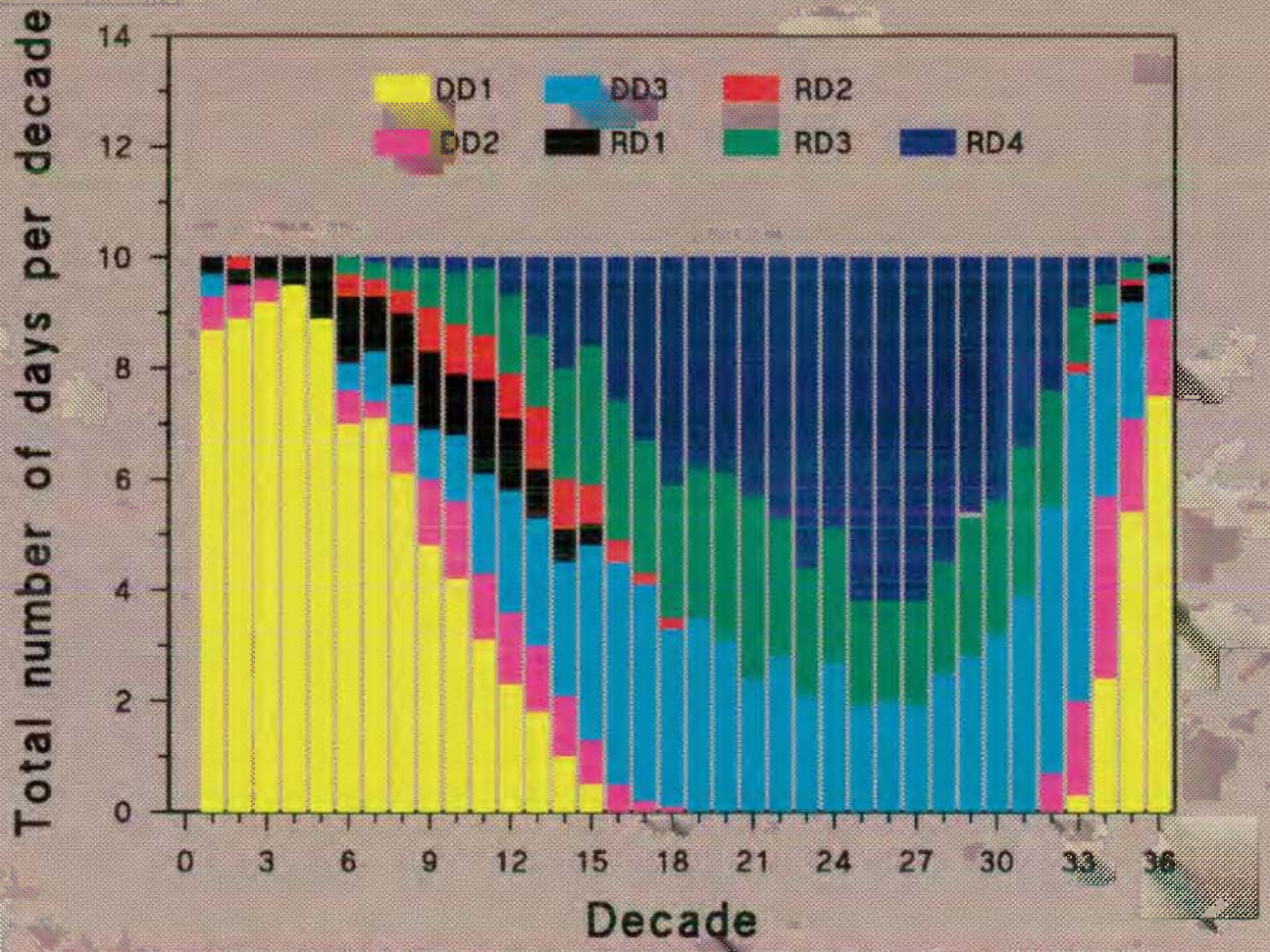

Figure 6.29 Composite graph showing average number of drydays and raindays per decade – Yengema (1948–77)

(iii) between July-October (21st-30th decades) only three types of days may occur at all stations.

The number of consecutive decades when all the seven day types may be experienced varies from four at Freetown (14th-17th) and Rokupr (13th-16th), to nine (7th-15th) at Yengema (E. Highlands). Consecutive decades with an average of only three types of days also vary from three (28th-30th) at Kabala (N. Plateau) to fifteen (17th-31st) at Solon (South).

The dominance of drydays with "deficit" soil moisture (DD1) at the beginning and end of the year, and raindays with "surplus" soil moisture (RD4) at the middle part of the year is clearly portrayed by the various graphs. Although, on average, all decades experience at least two day types, more than 50% (> 90% in some cases) of the days per decade during the respective periods are DD1, and RD4.

The number of consecutive decades when over 50% of the days are DD1 varies from ten (35th-8th) at Yengema (E. Highlands), to seventeen (34th-13th) at Freetown (W. Coast). On the other hand, the number of consecutive decades when over 50% of the days are RD4 varies from one (26th) at Kabala (N. Plateau), to twelve at both Makeni (19th-30th) and Rokupr (18th-28th, and 30th). For most regions drydays with "adequate" soil moisture (DD3) form the greatest percentage of days between decades 28-33.

DECADE	STATION							
	BO	F/T	KABA	MAKE	N2 R	ROKU	SOLO	YENG
1	3	5	3	3	3	2	6	4
2	5	3	2	3	3	4	6	4
3	4	4	2	2	2	3	5	3
4	2	3	2	2	2	2	4	2
5	4	2	2	2	2	2	6	2
6	5	2	2	2	3	2	5	6
7	4	4	6	2	2	4	5	7
8	4	4	4	2	2	3	4	7
9	6	4	4	6	2	2	4	7
10	6	4	7	6	5	4	6	7
11	7	6	6	7	4	6	6	7
12	7	6	6	7	7	6	7	7
13	7	6	7	7	7	7	7	7
14	7	7	7	7	7	7	7	7
15	7	7	7	7	7	7	7	7
16	7	7	7	7	7	7	7	5
17	5	7	7	3	7	4	3	5
18	4	4	7	3	5	3	3	5
19	3	3	7	3	3	3	3	3
20	3	3	6	3	3	3	3	3
21	3	3	5	3	3	3	3	3
22	3	3	5	3	3	3	3	3
23	3	3	5	3	3	3	3	3
24	3	3	6	3	3	3	3	3
25	3	3	4	3	3	3	3	3
26	3	3	5	3	3	3	3	3
27	3	3	5	3	3	3	3	3
28	3	3	3	3	3	3	3	3
29	3	3	3	3	3	3	3	3
30	3	3	3	3	5	3	3	3
31	3	4	5	3	6	4	3	3
32	4	7	6	5	7	5	5	4
33	6	7	7	5	7	5	5	6
34	7	6	4	6	7	7	7	7
35	7	7	4	7	6	6	5	7
36	6	5	6	5	5	3	5	5

Table 6.6 Total number per decade of different raindays and drydays at eight stations (average 1948-77).

6.5 SUMMARY

This chapter describes both the annual and seasonal occurrence and variability of the different types of drydays and raindays that were identified in chapter four. There are significant annual, seasonal, and regional variations in the occurrence of these days, which reflect the nature of both regional and local meteorological and geographical factors that produce rainfall in the study area. Drydays with "deficit" soil moisture occur more frequently in the north, west, and northwest, than in other areas. The reverse is the case for raindays with "adequate" soil moisture.

The graphs showing the combined distribution of drydays and raindays highlight the variability of rainfall and soil moisture conditions at the start and end of the season. In most parts of the country, it is common for all the seven types of days to occur within a single decade during these periods. During the middle of the season, however, only three types of days can occur within any decade, on average. This has serious implications for agricultural planning, as will be discussed in chapter eight. In the next chapter hydrological periods or seasons will be identified based on the relative frequency of occurrence of the various categories of drydays and raindays.